#### EQUIPMENT LIST

#### PROJECT DESCRIPTION

# GENERAL

This project is located at the intersection of MD 175 and Brock Bridge Road in Anne Arundel County, Maryland and involves the construction of a new fully operational traffic signal. MD 175 is assumed to run in an East/West direction.

### II. INTERSECTION OPERATION

The proposed traffic signal will operate in a NEMA three (3) phase, fully traffic actuated mode. The MD 175 approaches will operate concurently with the westbound left turns operating in an exclusive/permissive (E/P) phase. The Brock Bridge Road and Jessup Baptist Church approaches will operate concurently.

A new eight phase fully traffic actuated controller with two (2) four channel rack mounted loop detector amplifiers, telemery module, intersection monitor with battery back up and two circuit flasher unit with relay package housed in a NEMA size six (6) base mounted cabinet will be placed.

### III. SPECIAL NOTES

- I. It is the responsiblity of the contractor to confirm geometrics prior to placing signal equipment.
- 2. The signal shop will be notified to perform internal wiring of the cabinet at MD 175 @ Brock Bridge Road. All cable shall be identified and brought into the controller by the contractor. The contractor shall notify Mr. Edward Rodenhizer, SHA Signal Shop at (410) 787-7650 seventy-two (72) hours in advance of this work.
- 3. MOT Plates for this project will be as follows: 104.00 to 104.00-12, 104.02-01, 104.03-01.
- 4. Interconnect to Wigley Avenue NOT provided per Woody Hood (TDSD).

## A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE

CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
9000	# EA	FURNISH SIZE 6 BASE MOUNTED CABINET AND CONTROLLER W/TELEMETRY, AUTOSCOPE DETECTION EQUIPMENT AND CAMERA
9002	2 EA	FURNISH DETECTOR AMPLIFIER 4-CH RACK MOUNT
9089	47 SF	FURNISH FLAT SHEET ALUM. SIGN-YELLOW, ORANGE & SILVER TO CONSIST OF:
		RIO-12 (I) (30*X36*) LEFT TURN YIELD ON GREEN SIGN-MAST ARM MOUNT W3-3 (3) (36*X36*) NEW SIGNAL AHEAD R3-7(R) (2) (30*X30*) RIGHT LANE MUST TURN RIGHT
9090	10.7 SF	FURNISH FLAT SHEET ALUM, SIGN-BLUE OR GREEN TO CONSIST OF: D-3(I)(I)(I6"X96") *Brock Bridge Road" SIGN DUAL FACED-MAST ARM MOUNT

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
1001	LS	MAINTENANCE OF TRAFFIC
2001	5 CY	TEST PIT EXCAVATION
5004	90 LF	FURNISH AND INSTALL 24" WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP BAR)
5001	2305 LF	FURNISH AND INSTALL 5-INCH YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	1550 LF	FURNISH AND INSTALL 5-INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING TAPE
5007	1880 LF	REMOVE EXISTING PAVEMENT MARKINGS-ANY WIDTH
6002	65 LF	STANDARD TYPE-A COMBINATION CURB AND GUTTER (12" GUTTER PAN 8" DEPTH)
800 <b>3</b>	I EA	FURNISH AND INSTALL 12" X 14' GALVANIZED STEEL PEDESTAL POLE (INCLUDE 4" SCHEDULE 80 PVC ELBOW AND 4-2"X90" ANCHOR BOLTS)
8001	7 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8023	8 LF	FURNISH AND INSTALL I*LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT (DETECTOR WIRE SLEEVE)
8022	30 LF	FURNISH AND INSTALL I'ELECTRICAL CONDUIT (GALVANIZED SLEEVE)
8016	2 EA	FURNISH AND INSTALL MICROLOOP PROBE SET W/500 FOOT LEAD-IN
8030	50 LF	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT-TRENCHED
8032	120 LF	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT-BORED
8029	175 LF	FURINISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT-BORED
8027	520 LF	FURINISH AND INSTALL 3" SCHEDULE 80 PVC CONDUIT-TRENCHED
8028	100 LF	FURINISH AND INSTALL 3' SCHEDULE 80 PVC CONDUIT-SLOTTED
8033	8 EA	FURNISH AND INSTALL HANDHOLE
8040	1270 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)
8021	440 LF	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
8048	60 LF	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
8041	275 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED)
8043	150 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR (NO.14 AWG)
8044	650 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO.14 AWG)
8045	130 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO.14 AWG)
8084	26 EA	FURNISH AND INSTALL 12' VEHICULAR TRAFFIC SIGNAL HEAD SECTION PAINTED BLACK
8051	75 LF	FURNISH AND INSTALL WOOD SIGN SUPPORT 4" x 6"
8052	39.5 SF	INSTALL GROUND MOUNTED SIGNS
8053	18.2 SF	INSTALL OVERHEAD SIGNS
8079	1 EA	FURNISH AND INSTALL MAST ARM POLE AND 70' MAST ARM (INCLUDE 4" SCHEDULE 80 PVC ELBOW AND 4-2"X90" ANCHOR BOLTS)
8006	LEA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8020	LEA	INSTALL CONTROLLER AND CABINET- BASE MOUNT
8034	3 EA	FURNISH AND INSTALL GROUND ROD-3/4" DIA. X 10' LENGTH
8066	1 EA	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, IPH, 3W)
8060	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

THE FOLLOWING CONTACT PERSONS FOR DISTRICT # 5 ARE AS FOLLOWS:

Mr. Edward Meehan District Engineer Phone: (410) 841-5450

Mr. Lawrence E. Elliott Assistant District Engineer-Traffic Phone: (410) 841-5450

Mr. Raymond Hutzler Assistant District Engineer-Maintenance Phone: (410) 841-5450

Mr. William Davitt Assistant District Engineer-Utility Phone: (410) 841-5450

Mr. Richard L. Daff Chief Traffic Operations Division Phone: (410) 787-7630

The Power Company Representative is:

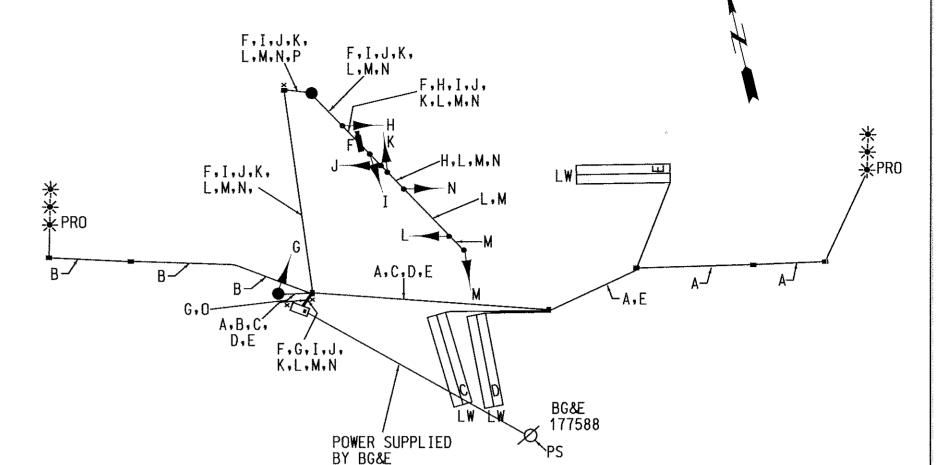
BALTIMORE GAS AND ELECTRIC COMPANY Mr.Ben Ward Southern Distribution 7317 Parkway Drive Hanover, Maryland 21076

The Phone Company Representative is:

BELL ATLANTIC Mr. Ron Pusloskie Phone: (410) 224-9245

The Cable Company Representative is:

COMCAST CABLE COMMUNICATIONS, INC. MR. Paul Heying Construction Coordinator Phone: (410) 268-1758 Ext. 656



# WIRING KEY

PROBE CABLE

C,D,E 2 CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14) AWG

3 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG

7 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG

G,H,I,J,K,L,M 5 CONDUCTOR ELECTRICAL CABLE (NO. 14) AWG

WIRING DIAGRAM

STRAND BARE COPPER GROUND WIRE (NO. 6) AWG

PRO PROBES

PS POWER SOURCE

LOOP WIRE

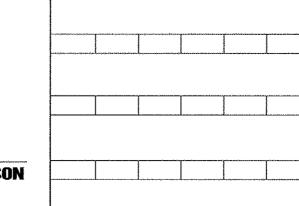
GROUND ROD AUTOSCOPE CAMERA

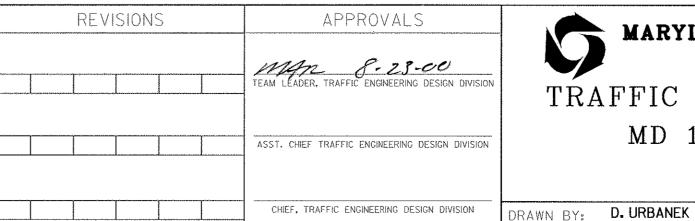
PHASE CHART

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PHASE 2 & 5	R	R	ĢG	G	R	R	R	R	1
PHASE 5 CHANGE	R	R	¥ G	G	R	R	R	R	<b>\</b>
PHASE 2 & 6	G	G	G	G	R	R	R	R	<u>-</u>
PHASE 2 & 6 CHANGE	Υ	Υ	Υ	Υ	R	R	R	R	<b>&gt;</b>
PHASE 4 & 8	R	R	R	R	G	G	G	G	
PHASE 4 & 8 CHANGE	R	R	R	R	Y	Υ	Y	Y	<b> </b>
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	<b>-</b>

PHASING NOTES :

- PHASE 2 WILL ALWAYS BE WITH PHASE 5 NEVER ALONE - PHASE 6 WILL ALWAYS BE WITH PHASE 2 NEVER ALONE - PHASE 4 WILL ALWAYS BE WITH PHASE 8 NEVER ALONE





DIRECTOR, TRAFFIC & SAFETY

CHECKED BY: M. WOLNIAK

SCALE:

NTS

22 AUGUST 2000

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION MD 175 AT BROCK BRIDGE ROAD

GENERAL INFORMATION

OG MILE:

LOG MILE: 06003201.33

ANNE ARUNDEL

TS NO. O.AA683A551B55 SHEET NO. T.I.M.S. NO. 2 of 3